

## **APPENDIX A**

BIOGRAPHICAL SKETCH			
NAME Gazit Dan	POSITION TITLE Associate Professor		
EDUCATION/TRAINING	DEGREE	YEAR	FIELD OF STUDY
Hebrew University of Jerusalem	D.M.D.	1970-1976	Dental Surgeon
Hebrew University of Jerusalem	Ph.D.	1986-1991	Bone Biology

#### Professional Experience

1981-1985	Instructor in Oral Pathology, Oral Pathology, Hebrew University of Jerusalem
1986-1992	Lecturer in Oral Pathology, Bone Biology and Pathology, Hebrew University of Jerusalem
1990-1992	Visiting Professor, Bone Biology, UCSF
1992-1999	Tenured Senior Lecturer in Oral Pathology, Bone Biology, Biotechnology and Pathology, Hebrew University of Jerusalem
1996-2001	Director, Oral Pathology, Oral Pathology Biopsy Facility, The Hebrew University-Hadassah Faculty of Dental Medicine
1997-1999	Director, Hebrew University Dental Sciences Graduate Program
1999	Visiting Professor, Bone Biology, Leiden Medical Center
1999	Visiting Professor, Bone Biology, Boston University
1999	Visiting Professor, Bone Biology, Harvard Medical School
1999-	Associate Professor, Bone Biology and Biotechnology, Hebrew University of Jerusalem

#### Professional Membership

1999-	Gene Therapy Steering Committee Member, Gene Therapy Center, Hadassah Medical Center, Jerusalem
2002-	Chairman of Biotech Committee, Hebrew University of Jerusalem

#### Selected peer-reviewed publications

1. Gazit, D., Zilberman, Y., Ebner, R. and Kahn, A. (1998) Evidence that bone loss (osteopenia) in old, male mice results from the diminished activity and availability of TGF- $\beta$ 1. J. Cell. Biochem. 70:478-488.
2. Gazit, D., Zilberman, Y., Turgeman, G., Zhou, S., and Kahn A. (1999) Recombinant TGF- $\beta$ 1 stimulates bone marrow osteoprogenitor cell activity and bone matrix synthesis in osteopenic, old male mice. J. Cell. Biochem. 73:379-389.

3. **Gazit, D.**, Turgeman, G., Kelley, P., Wang, E., Jalenak, M., Zilberman, Y. and I.K. Moutsatsos. (1999). Engineered pluripotent mesenchymal cells integrate and differentiate in regenerating bone: A novel cell-mediated gene therapy. *J Gene Med.* 1:121-133.
4. Moutsatsos IK, Turgeman G, Zhou S, Kurkalli BG, Pelled G, Tzur L, Kelley P, Stumm N, Mi S, Muller R, Zilberman Y, **Gazit D.** (2001) Exogenously regulated stem cell-mediated gene therapy for bone regeneration. *Mol Ther.* 3(4): 449-61.
5. Turgeman G, Pittman DD, Muller R, Kurkalli BG, Zhou S, Pelled G, Peyser A, Zilberman Y, Moutsatsos IK, **Gazit D.** (2001) Engineered human mesenchymal stem cells: a novel platform for skeletal cell mediated gene therapy. *J Gene Med.* 3(3): 240-51.
6. Zhou S, Zilberman Y, Wassermann K, Bain SD, Sadovsky Y, **Gazit D.** (2001) Estrogen modulates estrogen receptor  $\alpha$  and  $\beta$  expression, osteogenic activity, and apoptosis in mesenchymal stem cells (MSCs) of osteoporotic mice. *J Cell Biochem. Suppl.* 36:144-55.
7. Honigman A, Zeira E, Ohana P, Abramovitz R, Tavor E, Bar I, Zilberman Y, Rabinovsky R, **Gazit D**, Joseph A, Panet A, Shai E, Palmon A, Laster M, Galun E. (2001) Imaging transgene expression in live animals. *Mol Ther.* 4(3): 239-49.
8. Alexander JM, Bab I, Fish S, Muller R, Uchiyama T, Gronowicz G, Nahounou M, Zhao Q, White DW, Chorev M, **Gazit D**, Rosenblatt M. (2001) Human parathyroid hormone 1-34 reverses bone loss in ovariectomized mice. *J Bone Miner Res* 16(9): 1665-73.
9. Hoffmann A, Czichos S, Kaps C, Bachner D, Mayer H, Zilberman Y, Turgeman G, Pelled G, Gross G, and **Gazit D.** (2002) The T-Box transcription factor Brachyury mediates cartilage development in mesenchymal stem cell line C3H10T1/2. *J. Cell Science.* 115, 769-781.
10. Turgeman G, Zilberman Y, Zhou S, Kelly P, Moutsatsos I.K, Kharode YP., Borella LE., Bex FJ., Komm BS., Bodine PVN., and **Gazit D** (2002). Systemically administrated rhBMP-2 promotes

- MSC activity and reverses bone and cartilage loss in osteopenic mice. *J. Cell Biochem*, 86(3):461-474.
11. Pelled G, Turgeman G, Aslan H, Gazit Z, and **Gazit D.** (2002) Mesenchymal stem cells for bone gene therapy and tissue engineering. *Current Pharmaceutical Design*, 8; 99-110.
  12. Zilberman Y, Turgeman G, Pelled G, Xu N, Moutsatsos IK, Hortelano G, and **Gazit D** (2002). Polymer encapsulated engineered mesenchymal stem cells secrete exogenously regulated rhBMP-2, and induce osteogenic and angiogenic tissue formation. *PAT*, 13; 863-870.
  13. Zhou S., Turgeman G., Harris SE., Leitman DC., Komm BS., Bodine PVN., and **Gazit D** (2003). Regulation of murine BMP-2 gene transcription by ER $\alpha$  and  $\beta$  in mesenchymal stem cells. *Mol. Endocrinol.* 17(1):56-66.
  14. Turgeman G., Aslan H., Gazit Z., and **Gazit D.** (2002). Cell mediated gene therapy for bone formation and regeneration. *Current Opinion in Molecular Therapeutics*. 4(4):390-4
  15. Ehrenfreund-Kleinman T., Gazit Z., **Gazit D.**, Azzam T., Golenser J. and Domb AJ. (2002) Synthesis and biodegradation of Arabinogalactan sponges prepared by reductive amination. *Biomaterials*, 23(23): 4621-4631.
  16. Bar I., Zilberman Y., Turgeman G., Zeira E., Galun E., Honigman A., Turgeman G., Clemens T., Gazit Z., **Gazit D.** Molecular Imaging of the skeleton: quantitative real time bioluminescence in transgenic mice. *J Bone Miner Res*, In press, 2003.
  17. Gafni Y., Gazit Z., **Gazit D.** Stem cells as vehicles for orthopedic gene therapy. *Gene therapy*, Accepted for publication, 2003.
  18. Aslan, H.; Zhou, S.; Pelled, G.; Turgeman, G.; McIlrney, S.; Komm, B.; Bodine, P.; **Gazit, D.** Transcriptional profiling of estrogen-induced osteogenic differentiation of Murine adult mesenchymal stem cells (AMSCs) in vitro, chapter 11 in: *Mesenchymal Stem cells: Biology and Potential Clinical Uses* ( Grisolia, S.; Minyana, D. & Bendala-Tufanisco, E., eds.) Ministerio de Sanidad y Consumo, Madrid, Spain, In press, 2003.